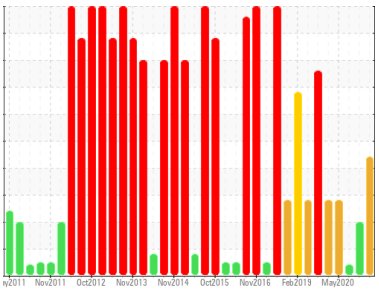
PROBLEM SUMMARY

Sample Rating Trend

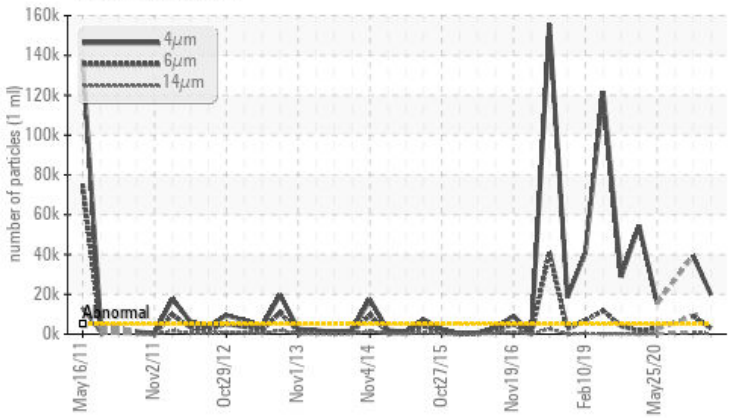


ISO

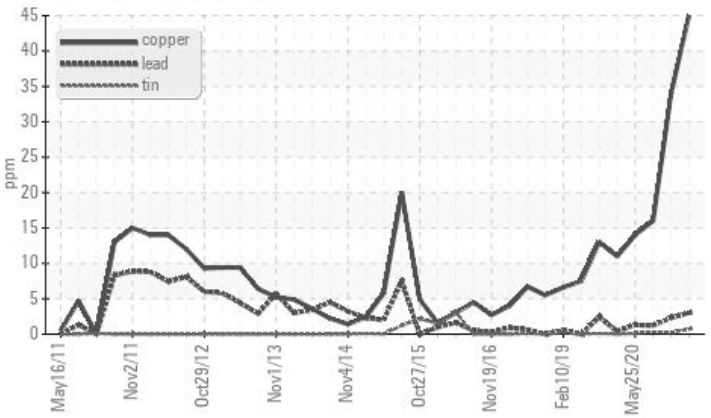
Area
TM 8
Machine Id
TM 8 SOUTH VACUUM PUMP
Component
Pump
Fluid
ROYAL PURPLE SYNFILM GT220 (35 GAL)

COMPONENT CONDITION SUMMARY

▲ Particle Trend



▲ Non-ferrous Metals



RECOMMENDATION

We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	ATTENTION	ABNORMAL
Copper	ppm	ASTM D5185m	>30	▲ **45**	34	16
Particles >4µm		ASTM D7647	>5000	▲ **19834**	39363	---
Particles >6µm		ASTM D7647	>1300	▲ **2953**	9096	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ **21/19/14**	22/20/17	---

Customer Id: KIMMOBTM8
Sample No.: RP0037982
Lab Number: 06179418
Test Package: IND 2

To manage this report scan the QR code

To discuss the diagnosis or test data:
Jonathan Hester +1 919-379-4092 x4092
jhester@wearcheckusa.com

To change component or sample information:
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Filter	---	---	?	We recommend you service the filters on this component if applicable.

HISTORICAL DIAGNOSIS

ISO

25 Oct 2022 Diag: Angela Borella
Resample at the next service interval to monitor.All component wear rates are normal. There is a moderate amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

VIS DEBRIS

16 May 2021 Diag: Don Baldridge
We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample.All component wear rates are normal. Moderate concentration of visible dirt/debris present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

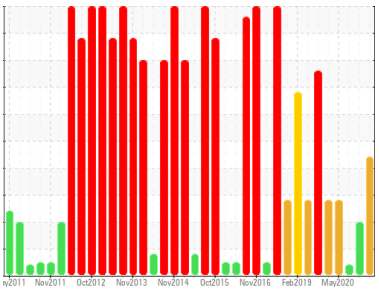
ISO

25 May 2020 Diag: Don Baldridge
We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor.All component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

OIL ANALYSIS REPORT

Sample Rating Trend



ISO

Area
TM 8
Machine Id
TM 8 SOUTH VACUUM PUMP
Component
Pump
Fluid
ROYAL PURPLE SYNFILM GT220 (35 GAL)

DIAGNOSIS

Recommendation
We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor.

Wear
The copper level is abnormal. All other component wear rates are normal.

Contamination
There is a high amount of silt (particulates < 14 microns in size) present in the oil.

Fluid Condition
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**RP0037982**	RP0023372	RP05256013
Sample Date		Client Info		**30 Apr 2024**	25 Oct 2022	16 May 2021
Machine Age	hrs	Client Info		**0**	0	0
Oil Age	hrs	Client Info		**0**	0	0
Oil Changed		Client Info		**N/A**	N/A	N/A
Sample Status				**SEVERE**	ATTENTION	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>90	**15**	13	5
Chromium	ppm	ASTM D5185m	>5	**0**	0	0
Nickel	ppm	ASTM D5185m	>5	**1**	0	<1
Titanium	ppm	ASTM D5185m	>3	**0**	0	0
Silver	ppm	ASTM D5185m	>3	**0**	0	<1
Aluminum	ppm	ASTM D5185m	>7	**<1**	<1	0
Lead	ppm	ASTM D5185m	>12	**3**	2	1
Copper	ppm	ASTM D5185m	>30	▲ **45**	34	16
Tin	ppm	ASTM D5185m	>9	**<1**	<1	<1
Antimony	ppm	ASTM D5185m		**---**	---	1
Vanadium	ppm	ASTM D5185m		**0**	0	0
Cadmium	ppm	ASTM D5185m		**0**	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**3**	0	11
Barium	ppm	ASTM D5185m		**<1**	0	0
Molybdenum	ppm	ASTM D5185m		**0**	0	0
Manganese	ppm	ASTM D5185m		**<1**	0	0
Magnesium	ppm	ASTM D5185m	90	**2**	0	0
Calcium	ppm	ASTM D5185m		**22**	22	20
Phosphorus	ppm	ASTM D5185m		**98**	82	81
Zinc	ppm	ASTM D5185m		**12**	19	15

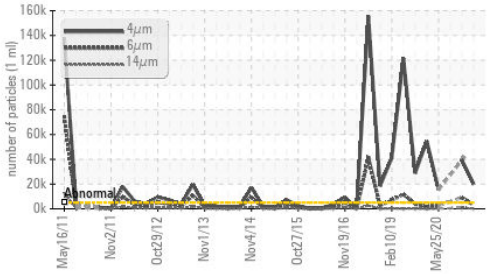
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>60	**5**	3	2
Sodium	ppm	ASTM D5185m		**2**	0	1
Potassium	ppm	ASTM D5185m	>20	**1**	0	0
Water	%	ASTM D6304	>.1	**0.007**	0.013	0.004
ppm Water	ppm	ASTM D6304	>1000	**79**	131.9	41.6

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	▲ **19834**	39363	---
Particles >6µm		ASTM D7647	>1300	▲ **2953**	9096	---
Particles >14µm		ASTM D7647	>160	**156**	919	---
Particles >21µm		ASTM D7647	>40	**23**	257	---
Particles >38µm		ASTM D7647	>10	**1**	10	---
Particles >71µm		ASTM D7647	>3	**1**	0	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ **21/19/14**	22/20/17	---

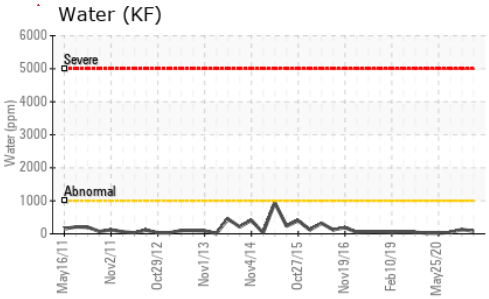
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.25	**0.31**	0.31	0.223

OIL ANALYSIS REPORT

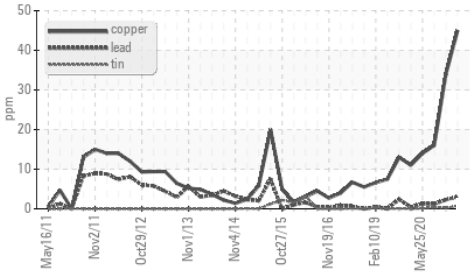
Particle Trend



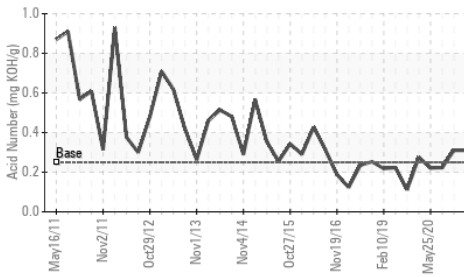
Water (KF)



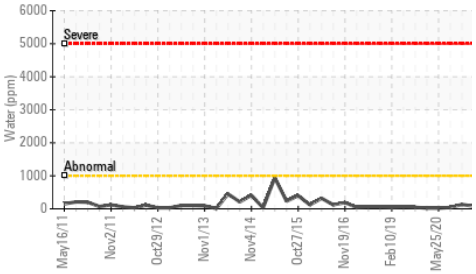
Non-ferrous Metals



Acid Number

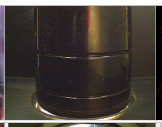
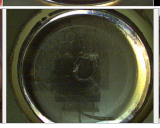
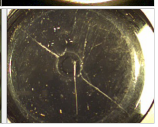


Water (KF)



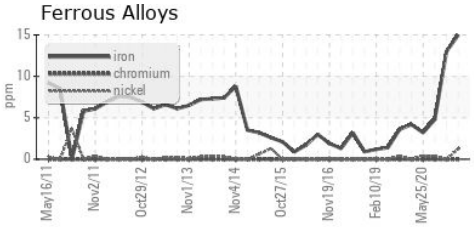
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	LIGHT	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Appearance	scalar	*Visual	NORML	**NORML**	NORML	NORML
Odor	scalar	*Visual	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	*Visual	>.1	**NEG**	NEG	NEG
Free Water	scalar	*Visual		**NEG**	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	220	**210**	210	210

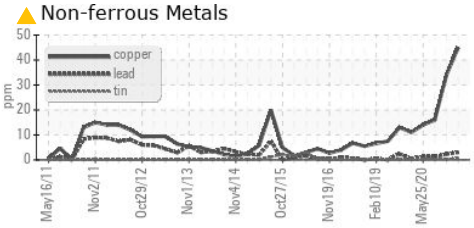
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

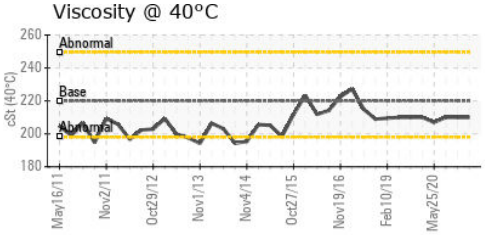
Ferrous Alloys



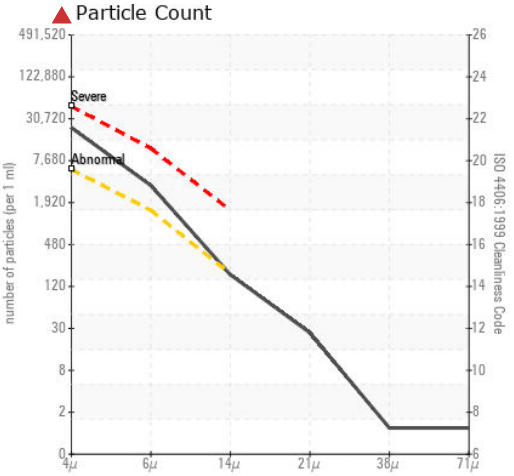
Non-ferrous Metals



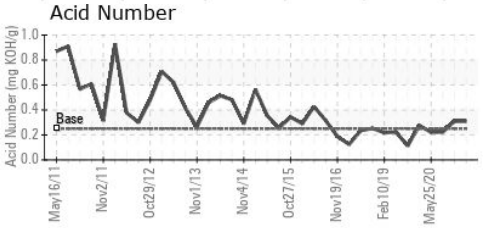
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RP0037982
Lab Number : 06179418
Unique Number : 11030744
Test Package : IND 2 (Additional Tests: PrtCount)

Received : 14 May 2024
Tested : 21 May 2024
Diagnosed : 21 May 2024 - Jonathan Hester

To discuss this sample report, contact Customer Service at 1-800-237-1369.
** - Denotes test methods that are outside of the ISO 17025 scope of accreditation.*
Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Kimberly-Clark - Mobile - TM 8
200 BAYBRIDGE RD
MOBILE, AL
US 36610
Contact: LARRY WEAVER
Larry.D.Weaver@kcc.com
T: (251)330-2356
F: (251)452-6335